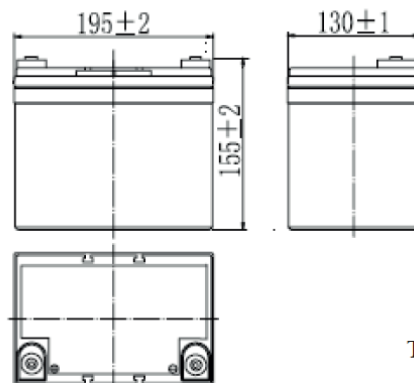


Electrical characteristics

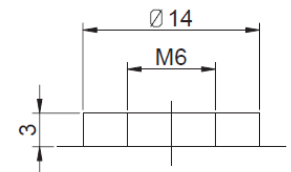
Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	33Ah
	5HR(10.2V)	25.7Ah
	1HR(9.6V)	19.2Ah
Dimension	Length	195±2mm
	Width	130±1mm
	Height	155±2mm
	Total Height	155±2mm
Approx. Weight		10.2kg (22.5lbs)±4%
Terminal type		T9
Internal resistance (Fully charged, 25°C)		Approx. 11mΩ
Capacity affected by temperature (10HR)	40°C	103%
	25°C	100%
	0°C	88%
	-15°C	70%
Self-discharge (25°C)	3 month	Remaining Capacity: 94%
	6 month	Remaining Capacity: 88%
	12 month	Remaining Capacity: 75%
Nominal operating Temperature		25°C±3°C(77°F±5°F)
Operating temperature range	Discharge	-15°C~55°C(5°F~131°F)
	Charge	-10°C~55°C(14°F~131°F)
	Storage	-20°C~55°C(-4°F~131°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.10 to 14.40V Temperature compensation: -30mV/°C
Maximum charging current		6.6A
Terminal material		Copper
Maximum discharge current		330 A(5 sec.)
Designed floating life(20°C)		15 years



Dimensions



Terminal



Terminal T9



Constant Current Discharge Characteristics (A, 25°C)

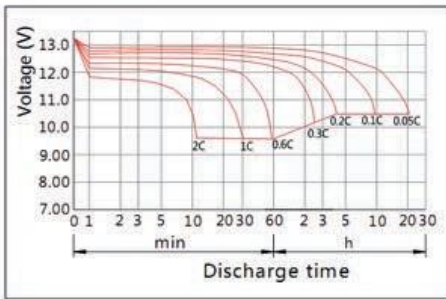
F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	48h	120h
9.60V	44.6	30.8	19.2	11.2	7.92	6.24	5.21	4.46	3.47	3.09	1.69	---	---
9.90V	43.6	30.1	18.9	11.2	7.85	6.20	5.18	4.42	3.43	3.09	1.68	----	---
10.2V	41.9	29.2	18.4	11.1	7.82	6.14	5.15	4.39	3.43	3.08	1.68	0.74	---
10.5V	40.6	28.5	18.1	10.9	7.76	6.11	5.12	4.36	3.40	3.06	1.65	0.73	0.30
10.8V	38.3	27.5	17.5	10.6	7.52	5.91	4.95	4.22	3.30	3.04	1.65	0.73	0.30

Constant Power Discharge Characteristics (Watt, 25°C)

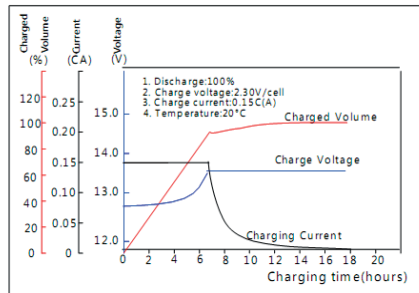
F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	48h	120h
9.60V	497	350	221	131	93.4	73.6	62.0	52.8	41.3	37.0	20.3	---	---
9.90V	485	344	218	130	93.1	73.3	61.7	52.5	41.3	37.0	20.3	----	---
10.2V	467	333	213	129	92.4	72.6	61.1	52.1	40.9	37.0	20.2	8.84	---
10.5V	451	325	208	127	91.7	72.3	60.7	51.8	40.6	36.6	19.9	8.78	3.66
10.8V	428	313	202	123	88.8	70.0	59.1	50.2	39.3	36.3	20.0	8.78	3.63

Note: The above characteristics data can be obtained within three charge/discharge cycles.

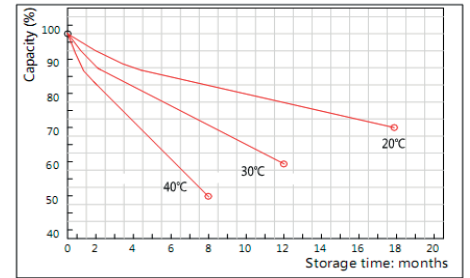
Discharge Characteristics(25°C)



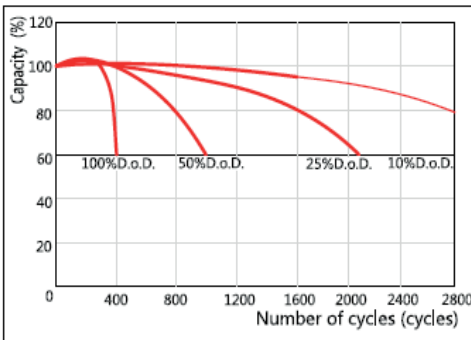
Charging Characteristics(25°C)



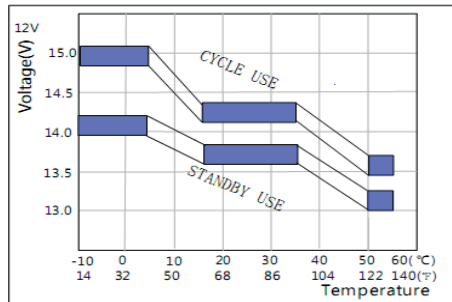
Self-discharge Characteristics



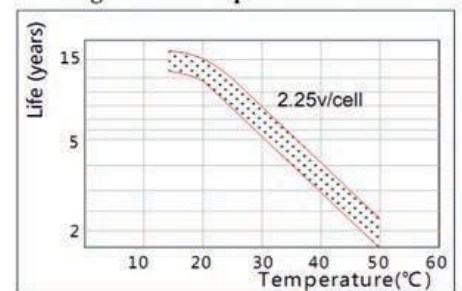
Cycle Life on D.O.D.(25°C)



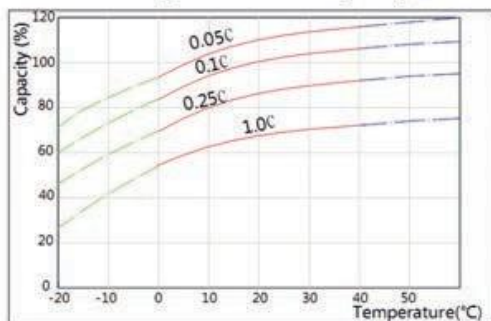
Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Effect of Temperature on Capacity



The Relationship for Open Circuit Voltage and Residual Capacity (25°C)

